GCWW Water Quality Table 2005

GCWW — Highest Quality Drinking Water

Greater Cincinnati Water Works continues to bring you a plentiful supply of the highest quality water. In fact, you'll be happy to know that your drinking water has always met or exceeded all of the state and federal health standards for drinking water. GCWW uses state-of-the-art treatment techniques to remove contaminants from the water and continuously monitors water quality throughout the system.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which shall provide the same protection for public health.

The tables below show the substances detected in GCWW drinking water while performing the most up-to-date monitoring required by the EPA. The substances found were present in quantities less than the EPA limits for safe drinking water. GCWW tests for many more substances that consistently meet all state and federal health standards for drinking water. If you would like a complete listing of GCWW test results, call (513) 591-7700.

Regulated Contaminants

Substances subject to a Maximum Contaminant Level (MCL), Action Level (AL) or Treatment Technique (TT)*. These standards protect drinking water by limiting the amount of certain substances that can adversely affect public health and are known or anticipated to occur in public water systems.

			Miller Water (from the Ohio River)				Bolton Water (from the Great Miami Aquifer)				Typical Source of Contamination (for more details, visit **www.epa.gov/safewater/hfacts.html**)
Substance (Unit)	Maximum Allowed (MCL*)	MCLG*	Highest Compliance Level Detected	Range of Detections	Violation	Year Sampled	Highest Compliance Level Detected	Range of Detections	Violation	Year Sampled	
Fluoride (ppm)	4	4	0.96	0.86 - 1.10	No	2005	1.00	0.88 - 1.05	No	2005	Additive which promotes strong teeth. May come from erosion of natural deposits.
Nitrate (ppm)	10	10	1.57	0.53 - 1.57	No	2005	2.60	0.97 - 2.60	No	2005	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.
Total Trihalomethanes (ppb)	80	na	31.6	12.3 - 68.7	No	2005	26.5	16.1 - 55.9	No	2005	Byproduct of drinking water disinfection, measured in the distribution system.
Haloacetic Acids (ppb)	60	na	7.77	2.09 - 15.1	No	2005	7.32	2.22 - 13.9	No	2005	Byproduct of drinking water disinfection, measured in the distribution system.
Gross Beta (pCi/L)	50	0	nd	nd	No	2003	4.8	na	No	2001	Decay of natural and man-made deposits. (EPA considers 50 pCi/L to be the level of concern.)
Turbidity (NTU)	TT1 < 1 NTU Max *and* TT2 < 0.3 NTU 95% of the time	na na	0.11 100% < 0.3 NTU	0.04 - 0.11	No	2005	nr	nr	na	na	Soil runoff.
Lead[2] (ppb)	AL = 15	0	*90th percentile* 7.3 (3 out of 107 samples tested were > the AL)	na	No	2005	*90th percentile* 7.3 (3 out of 107 samples tested were > the AL)	na	No	2005	May come from erosion of natural deposits. There is no detectable lead in our water as it leaves the treatment plants. However, corrosion of household plumbing is a source of lead and copper contamination. GCWW tests water samples collected at customer taps, as required by the Safe Drinking Water Act to ensure safe water.
Copper[2] (ppm)	AL = 1.3	1.3	*90th percentile* 0.0376 (0 out of 107 samples tested were > the AL)	na	No	2005	*90th percentile* 0.0376 (0 out of 107 samples tested were > the AL)	na	No	2005	
Total Organic Carbon	TT[1]	na	2.49	1.45 - 3.60	No	2005	nr	nr	na	na	Naturally present in the environment.
Total Chlorine[2] (ppm)	MRDL=4	MRDLG=4	0.94	0.76 - 1.03	No	2005	0.94	0.76 - 1.03	No	2005	Water additive used to control microbes.
Total Coliform Bacteria[2] (% positive)	5%	0	1.0%[3]	0 - 1.0%	No	2005	1.0%	0 - 1.0%	No	2005	Naturally present in the environment.

Unregulated Contaminants

Substances for which EPA requires monitoring to determine where certain substances occur and whether it needs to regulate those substances.

		Miller Water				Bolton Water				Typical Source of Contamination
Substance (Unit)	MCLG*	Avg. Level Detected	Range of Detections	Violation	Year Sampled	Avg. Level Detected	Range of Detections	Violation	Year Sampled	
Chloroform (ppb)	na	2.63	na	na	2005	1.31	na	na	2003	Byproducts of drinking water disinfection, measured at the point of entry to distribution system
Bromodichloromethane (ppb)	0	2.15	na	na	2005	3.36	na	na	2003	
Dibromochloromethane (ppb)	60	2.72	na	na	2005	7.76	na	na	2003	
Bromoform (ppb)	0	nd	na	na	2005	7.87	na	na	2003	
Sulfate (ppm)	na	89	57-136	na	2005	50	48-52	na	2004	Erosion of natural deposits

Foot Notes

1 The value reported under "Highest Compliance Level Detected" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

2 Miller and Bolton were considered as one distribution system for regulatory purposes by Ohio EPA during 2005. Data listed for each system represents the combined distribution system.

3 In 2005 only 4 of 3,408 distribution samples were positive for coliform bacteria. The repeat samples were negative.

*Definitions

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Action Level or AL: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfection Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal or MRDLG: The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Radon: Radon is a radioactive gas that occurs naturally in some ground water. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes or clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. Major sources of radon gas are soil and cigarettes. Inhalation of radon gas has been linked to lung cancer, however, the effects of radon ingested in drinking water are not yet clear. If you are concerned about radon in your home, tests are available to determine the total exposure level. GCWW monitored for radon in Bolton finished water during 2001. One sample was collected and the radon level was 200pCi/L. This was less than the USEPA proposed MCL of 300 pCi/L for radon. For additional information on how to have your home tested, call (800) SOS-RADON.

Turbidity: Utilities who treat surface water are required to report on turbidity as an indication of the effectiveness of the filtration system. Turbidity is a measure of the cloudiness of water. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table, GCWW's highest recorded turbidity result for 2005 was 0.11 NTU (Miller Water) and lowest monthly percentage of samples meeting the turbidity limits was 100%.

Abbreviations

ppb: parts per billion or micrograms per liter

ppm: parts per million or milligrams per liter

nr: not regulated

na: not applicable

NTU: Nephelometric Turbidity Unit, used to measure clarity in drinking water

nd: not detectable at testing limits

pCi/L: picoCuries per liter, a measure of radioactivity in water